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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/808,377
Filing Date: March 24, 2004
Appellant(s): Esa Paatero

Robert M. Meeks
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 7, 2008 appealing from the Office action mailed 10/11/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,819,576	Johnson, Jr.	11/2004
6,483,730	Johnson, Jr.	11/2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. Applicant's arguments with respect to claims 1-48 have been considered but are moot in view of the new ground(s) of rejection.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a. person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made. 3. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, Jr. (U.S. Patent # 6,819,576) in combinations with Johnson, Jr. 'U.S. Patent # 6,483,730). Johnson, Jr. (576) discloses claimed subject matters a power conversion apparatus (figure 2 and 3), including DC link comprising first and second bus (figure 3, item 305a and 305b), a reference bus (figure 3, item GND), first and second DC voltages (figure 3, item V1 and V2), an uninterruptible power supply (Abstract, line 1-5) and a pre charge circuit (figure 3, item 330), an AC source and/or DC source (figure 3, item10 and 303), a balancer circuit (column 2, line 35-45), an inductor (figure 3, item L1), a first and second switches (figure 3,.item Q1 and Q2), a third switch (figure 3, item S), a common half- bridge circuit (figure 3, item L1 ,Q1 and Q3), a rectifier circuit (figure 3, item 310). However Johnson, Jr. (576) does not disclose

the utilization technique for a transferring charge from first capacitor to second capacitor, a buck converter and boost converter topology Johnson, Jr. (730) teaches the utilization of the similar technique for a transferring charge from first capacitor to second capacitor (column 4, line 15-21), a buck converter and boost converter topology (column 9-12, line 1-65). It would have been obvious one having an ordinary skill in the art at the time the invention was made to modify Johnson, Jr. (576)'s power supply by utilizing the technique taught by Johnson, Jr. (730) for the purpose of providing a mechanism for controlling voltage excursions on intermediate DC busses and also improve the power factor of the power supply. Further circuit meets the structure requirement.

For method claims 40-48, note that under MPEP 21 12.02, the principles of inherency, if a prior ad device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the Specification for carrying out the claimed method, it can be assumed the device "11 inherently perform the claimed process. In re King, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986). Therefore the previous rejections based on the apparatus will not be repeated.

(10) Response to Argument

The Appellant has argued 'the Office Action provides virtually no reasoning regarding a motivation or suggestion to combine Johnson '576 and '730; the key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s)

why the claimed invention would have been obvious, and the Office Action is completely deficient in this respect.' The Examiner does agree that there was a typing error, and a part of the motivation statement was left out. The motivation statement was presented on page 3 of the Non-Final action mailed June 1, 2007. The Examiner has now added the same statement in the rejection presented above. The rejection above satisfies all the elements of prima facie case of obviousness including motivation.

The Appellant has argued 'the Office Action also commits clear errors of fact in its interpretation of the references. For example, the Office Action mistakenly alleges that "item 330" corresponds to the recited "pre-charge circuit" of Claim 1. The circuit 330 in FIG. 3 of Johnson '576 is a *battery converter circuit,* and there is no teaching or suggestion in Johnson '576 that it operates as a pre-charge circuit in the manner recited in the claims. The Examiner respectfully disagrees. The battery circuit of Johnson '576 is coupled to DC link (305a, 305b) and is operative to charge a first capacitance (C1) between the DC bus and the reference bus (GND), and transfer charge from the first capacitance to a second capacitance (C2) between the DC bus and the reference bus. Hence, the battery circuit functions as a 'pre-charge' circuit

The Appellant has also argued, the rejections of Claims 1-48 clearly fail to meet the requirements for *a prima facie* showing of obviousness under 35 U.S.C. §103. Among other things, the Office Action fails to provide any specific indication as to which of Claims 1-48 the items in this listing pertain. It appears that the teachings attributed to Johnson '576 and Johnson '730 refer generally to independent Claims 1, 20, 25 and 40, but the Office Action merely recites a list of items from each reference without any discussion of their specific application to specific claim recitations, or how items from

the two references would be combined in the proposed combination. Furthermore, other than a conclusory assertion that "it would have been obvious," the Office Action provides virtually no reasoning regarding a motivation or suggestion to combine Johnson '576 and '730. As discussed above, the key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious, and the Office Action is completely deficient in this respect. As stated above, the Examiner does recognize that there was a typing error in the obviousness statement, which has now been completed above. In addition, the Examiner has provided specific references to the claim numbers, while referring to the elements, and how the claims are satisfied. Thus the combination is not a conclusory statement but, an obviousness rejection based on elements of prima facie case of obviousness.

Detailed explanation of the individual claim reads on prior art presented below.

1. (Original) A power conversion apparatus Johnson, Jr. (576) (figure 2 and 3) comprising: a DC link comprising first and second DC busses and a reference bus (figure 3, item 305a and 305b; a DC generator circuit coupled to the DC link and operative to generate first and second DC voltages (figure 3, item V1 and V2) with respect to the reference bus (figure 3, item GND) on respective ones of the first and second DC busses; and a pre-charge circuit (figure 3, item 330) coupled to the DC link and operative to charge a first capacitance (figure 3, item C1) between the first DC bus

and the reference bus and to transfer charge from the charged first capacitance to a second capacitance (figure 3, item C2) between the second DC bus and the reference bus. However just to meet the claim limitation first capacitor charge second capacitor cited Johnson, Jr. (730) reference. According to claim 19, a pre-charge circuit is a buck converter coupled to DC bus, applied art of Johnson, Jr. (576) figure 3 clearly discloses converter 330 coupled to DC bus. in Regards to claim 20, a power conversion circuit with first and second buses and a reference bus generate first and second voltage by utilizing boost topology and transferring charge from one capacitor to second capacitor similar technique taught by applied art of Johnson, Jr. (730). In regards to claim 25, claims uninterruptible power supply (UPS) similar technique utilized by both applied art (Abstract, line 1-5) Johnson, Jr. (576) and (730). In regards to claim 40 is method claim similar to apparatus claim.

Further in regards dependent claims subject matters also point out by examiner such as a balance circuit, an inductor, a half bridge circuit. As explained above applied art of Johnson, Jr. (576) discloses claimed invention except some language such as first capacitor charge second capacitor and utilization of buck boost topology circuits shows an equivalent structure known in the art because these two art Johnson, Jr. (576) and Johnson, Jr. (730) were art-recognized equivalent at time the invention was made, one of ordinary skill in the art would have found oblivious. Further it has been held that rearranging part of an invention involve only routine skill in the art. In re Japkise, 86 USPQ 70.

The dependent Claims 2-18, 21-24, 26-39 and 41-48 are also not patentable at least by virtue of the non-patentability of the respective ones of independent Claims 1, 20, 25 and 40 from which they depend.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Akm Enayet Ullah/

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